AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (original): A method of determining a reference picture for blocks constituting a current picture, the method comprising:

(a) preparing tag information describing a plurality of pictures; and

(b) determining one of the plurality of pictures to be the reference picture by referring to the tag information.

2. (original): The method of claim 1, wherein (b) comprises:

(b1) assigning priority to at least one picture based on the tag information;

(b2) performing a motion estimation process on the blocks by using the priority-assigned picture ahead of other pictures; and

(b3) if a picture satisfying a predetermined criterion is detected in the motion estimation process of (b2), determining the picture to be the reference picture.

3. (original): The method of claim 2, wherein (b1) comprises performing a monitoring process on tag information corresponding to the determined reference picture for a predetermined number of blocks constituting the current picture, and assigning priority to a

picture having tag information equal to or associated with the tag information corresponding to multiple reference pictures.

4.   (original): The method of claim 2, wherein (b1) comprises performing a monitoring process on tag information corresponding to the determined reference picture for blocks constituting the current picture or blocks being located on a predetermined portion of slices constituting the current picture, and assigning priority to a picture having tag information equal to or associated with the tag information corresponding to multiple reference pictures.

5.   (original): The method of claim 2, wherein (b2) comprises, if a plurality of pictures have the same priority, performing the motion estimation process by using a recent picture ahead of other pictures.

6.   (original): The method of claim 2, wherein (b3) comprises, if a picture having a residual error not more than a predetermined threshold value is detected, determining the picture to be the reference picture.

7.   (original): The method of any one of claims 1 through 6, wherein the tag information indicates a big motion or a global change of the reference picture relative to the current picture.

8.   (original): A method of determining a reference picture, the method comprising:

(a) performing a motion estimation process on blocks constituting a portion of a current picture by using pictures indicated by a reference index list, and determining the reference picture based on a result of the motion estimation process; and

(b) monitoring the determined reference picture, and determining a reference picture for blocks constituting another portion of the current picture based on a result of the monitoring process.

9.   (original): The method of claim 8, wherein (a) comprises determining a reference picture for blocks being located on the current picture or at a front portion of a slice of the current picture.

10.   (original): The method of claim 8, wherein (b) comprises, if multiple reference pictures have tag information indicating a big motion or a global change, determining a picture corresponding to the tag information as the reference picture for blocks constituting another portion of the current picture.

11.   (original): The method of claim 8, wherein (b) comprises:

(b1) assigning priority to a picture having tag information equal to or associated with tag information corresponding to multiple reference pictures out of pictures indicated by the reference index list;

(b2) performing a motion estimation process by using the priority-assigned picture ahead of other pictures; and

(b3) determining the reference picture based on a result of the motion estimation process.

12.   (original): The method of claim 11, wherein (b2) comprises, if a plurality of pictures have the same priority, performing the motion estimation process by using a recent picture ahead of other pictures.

13.   (original): The method of claim 11, wherein (b3) comprises, if a picture having a residual error not more than a predetermined threshold value is detected, determining the picture to be the reference picture.

14.   (currently amended): A method of determining a reference picture for blocks constituting a current picture by using a multiple-reference scheme, the method comprising:

(a) performing a motion estimation process by using a recent picture;

(b) if a resulting value of the motion estimation process is not more than a predetermined threshold value, determining the recent picture as the reference picture; and

(c) if a resulting value of the motion estimation process is more than a predetermined threshold value, determining the reference picture by using pictures indicated by the reference index list, wherein (c) comprises (c3) preparing the reference index list.

15.   (original): The method of claim 14, wherein (c) comprises:

(c11) performing the motion estimation process on pictures indicated by the reference index list; and

(c12) determining the reference picture based on a result of the motion estimation process of (c11).

16. (original): The method of claim 15, wherein (c12) comprises, if a picture having a residual error not more than a predetermined threshold value is detected, determining the picture to be the reference picture.

17. (original): The method of claim 14, wherein (c) comprises:

(c21) assigning priority to at least one of the pictures indicated by the reference index list based on tag information;

(c22) performing a motion estimation process on the blocks by using the priority-assigned picture ahead of other pictures; and

(c23) determining the reference picture based on a result of the motion estimation process.

18. (original): The method of claim 17, wherein (c21) comprises performing a monitoring process on tag information corresponding to the determined reference picture for a predetermined number of blocks constituting the current picture, and assigning priority to a picture having tag information equal to the tag information corresponding to multiple reference pictures.

19. (original): The method of claim 17, wherein (c21) comprises performing a monitoring process on tag information corresponding to the determined reference picture for a predetermined number of blocks constituting the current picture, and assigning priority to a

picture having tag information equal to or associated with the tag information corresponding to

multiple reference pictures.

20.   (original): The method of claim 17, wherein (c23) comprises, if a picture having

a residual error not more than a predetermined threshold value is detected, determining the

picture to be the reference picture.

21.   (canceled).

22.   (currently amended): The method of ~~claim 21~~claim 14, wherein (c3) comprises:

loading the recent picture on the reference index list when the recent picture is used as a

reference picture for blocks constituting the current picture;

loading the recent picture on the reference index list when the recent picture is not used

as the reference picture for blocks constituting the current picture and tag information is assigned

to the recent picture; and

removing the recent picture when the recent picture is not used as the reference picture

for blocks constituting the current picture and tag information is not assigned to the recent

picture.

23.   (original): The method of claim 22, wherein (c3) further comprises:

loading a picture having tag information indicating a big motion of the current picture on

the reference index list; and

loading a picture having tag information indicating a global change of the current picture on the reference index list.

24.   (original): A method of compensating for a motion, the method comprising:

(a) reading a reference picture, wherein the reference picture is obtained by performing a motion estimation process on blocks constituting a portion of a current picture by using pictures indicated by a reference index list, determining a reference picture based on a result of the motion estimation process, performing a monitoring process on tag information attached to the determined reference picture, and determining a reference picture for blocks constituting another portion of the current picture based on a result of the monitoring process; and

(b) performing a motion compensation process by using a motion vector corresponding to the read reference picture.

25.   (original): The method of claim 24, wherein the determined reference picture is obtained by determining a picture corresponding to the tag information if multiple reference pictures have tag information indicating a big motion or a global change.

26.   (original): The method of claim 24, wherein the determined reference picture is obtained by assigning priority to a picture having tag information equal to or associated with tag information corresponding to multiple reference pictures out of pictures indicated by the reference index list, performing a motion estimation process by using the priority-assigned picture ahead of other pictures.

27.   (original): An apparatus for encoding moving picture data, the apparatus comprising:

a memory unit which stores a reference index list and pictures, wherein tag information is attached to a portion of the pictures indicated by the reference index list;

a motion estimation unit which performs a motion estimation process on blocks constituting a portion of a current picture by using pictures indicated by a reference index list, determines a reference picture based on a result of the motion estimation process, monitors the determined reference picture, determines a reference picture for blocks constituting another portion of the current picture based on a result of the monitoring process, and calculates a motion vector for the blocks based on the determined reference picture for blocks constituting another portion of the current picture; and

a motion compensation unit which performs a motion compensation process by using the reference picture corresponding to the motion vector calculated by the motion estimation unit.

28.   (original): The apparatus of claim 27, wherein the motion estimation unit assigns priority to a picture having tag information equal to or associated with tag information corresponding to multiple reference pictures out of pictures indicated by the reference index list, performs a motion estimation process by using the priority-assigned picture ahead of other pictures.

29.   (original): An apparatus for decoding a bitstream having encoded moving picture data, the apparatus comprising:

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a memory unit which stores a reference picture, wherein the reference picture is obtained by performing a motion estimation process on blocks constituting a portion of a current picture by using pictures indicated by a reference index list, determining a reference picture based on a result of the motion estimation process, performing a monitoring process on tag information attached to the determined reference picture, and determining a reference picture for blocks constituting another portion of the current picture based on a result of the monitoring process, wherein the current picture constitutes the encoded moving picture data;

a motion vector decoding unit which decodes the motion vector extracted from the bitstream; and

a motion compensation unit which performs a motion compensation process by using a reference picture read from the memory and a motion vector provided by the motion vector decoding unit.

30.   (original): The apparatus of claim 29, wherein the reference picture is obtained by assigning priority to a picture having tag information equal to or associated with tag information corresponding to multiple reference pictures out of pictures indicated by the reference index list, performing a motion estimation process by using the priority-assigned picture ahead of other pictures.

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